

In the Claims:

Please cancel claims 1-12 without prejudice and add claims 13-24 as follows:

Claims 1-12 (canceled)

13. (new) A linear measuring device for measuring a relative position of a first machine element with respect to a second machine element, comprising:

a housing fastened to said first machine element;

a scale within said housing, wherein said scale is fastened extending along said housing in a measuring direction;

a scanning device for scanning said scale;

a linear guide device comprising:

a guide rail, which is rigidly assigned to said housing and includes a guide area; and

a guide carriage, which supports said scanning device and is guided on said guide rail along said housing in said measuring direction, wherein said guide carriage is connected to said guide rail, free of play in all directions perpendicular to said measuring direction and said guide carriage comprises a fastener to fasten said guide carriage rigidly on said second machine element in said measuring direction and said all directions perpendicular to said measuring direction;

wherein said housing is structured so that during measuring operations it is deflected perpendicular to said measuring direction at least in said guide area, so that in the course of movement of said guide carriage in a direction perpendicular to said measuring direction said housing is taken along in said direction perpendicular to said measuring direction.

14. (new) The linear measuring device in accordance with claim 13, wherein

said guide rail is constituted by an exterior face of said housing.

15. (new) The linear measuring device in accordance with claim 14, wherein said housing is tube-shaped and has a circular-cylindrical circumferential area defining said guide area of said guide rail, wherein said guide carriage is guided on said guide area, free of play and with a degree of freedom in said measuring direction, as well as with a rotary degree of freedom around a longitudinal axis of said housing.

16. (new) The linear measuring device in accordance with claim 13, wherein said scanning device is rigidly connected with said guide carriage in said measuring direction and in said all directions perpendicular to said measuring direction.

17. (new) The linear measuring device in accordance with claim 13, wherein said scale comprises a measuring structure, which can be photo-electrically scanned and wherein said scanning device comprises at least one light source and a light-sensitive detector.

18. (new) The linear measuring device in accordance with claim 13, wherein said scale is arranged inside said housing, and wherein said scanning device comprises:

at least one light source; and

a light-sensitive detector outside of said housing for scanning said scale via a light beam through said housing, for which purpose said housing is transparent to said light beam at least in a circumferential scanning area.

19. (new) The linear measuring device in accordance with claim 13, wherein

said scale is fastened on an interior wall along said housing.

20. (new) The linear measuring device in accordance with claim 19, wherein said scale is a linearly rigid steel tape of low flexural strength.

21. (new) The linear measuring device in accordance with claim 13, wherein said housing is linearly rigid and has flexural strength.

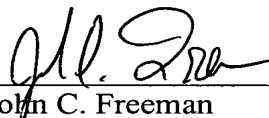
22. (new) The linear measuring device in accordance with claim 21, wherein said housing comprises a first mounting element with a first connector located at one end of said housing and a second mounting element with a second connector located at another end of said housing and wherein said first connector and said second connector hold said housing on said first and second mounting elements deflectable perpendicular to said measuring direction.

23. (new) The linear measuring device in accordance with claim 22, wherein said first connector connects said housing so as to be linearly movable with respect to said first mounting element, and said second connector connects said housing rigidly in said measuring direction with respect to said second mounting element.

24. (new) The linear measuring device in accordance with claim 13, wherein said housing is linearly rigid and has low flexural strength.

Please note that new claims 13-24 are being presented to provide additional coverage regarding a linear measuring device and a method for absolute position measuring. In addition, since the original claims reflect a literal translation of the claims of the corresponding Patent Cooperation Treaty, there is a need to stylize their language to everyday English and to use U.S. patent terminology. Accordingly, the cancellation of original claims 1-12 and the addition of new claims 13-24 are not being presented for reasons of patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002).

Respectfully submitted,



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